

RESUMES + CLIPPINGS

Caralora

McClellan Vs. The Mob: Stolen Securities Probed

DAN CASOLARO

Washington Correspondent

Revelations in the Senate Subcommittee on Crime revealed a pioneer but monumental task: stolen and counterfeit securities.

\$434 million in stolen securities were reported to Senator John McClellan, who chairs the Sub-committee, the figure is a part of the picture. "Many thefts of securities from brokerage firms, banks and other institutions involving large sums of money are being manipulated," McClellan said.

A Wall Street Securities computation indicates that at least \$10 billion in stolen securities are scattered around the world. "The matter is worse," said McClellan, "there is no even estimate to what extent counterfeit securities are being manipulated."

Problems in finding out just how big the problem is to be the banks themselves. Institutions sometimes prefer to absorb the loss from thefts or counterfeit securities rather than risk injuring their public relations. The huge volume of brokerage transactions has reached such proportions that it is impossible to account for many of their transactions.

"The problem continues to grow," McClellan said. "It is the very basis of our economic

process. The huge volume of securities that pass through banks makes it impossible to check each and every stock or bond that they get. "Criminals can capitalize on this flaw," said McClellan.

According to the Investigation Subcommittee staff members, Philip Manuel and John Brick, a possessor of fake or stolen securities generally does one of three things with them. He can sell them, or he can use them as collateral for a loan or he can set up a trust account at a bank and obtain negotiable paper or a letter of credit in return. If he gets a loan he may or may not intend to pay it back. If not, he generally uses an assumed name. Securities are stolen from individuals as well as brokerage houses, banks and the U. S. Mail.

One confidence man who marketed stolen securities told the Subcommittee just how easy it was. He explained how he and several others found \$200,000 worth of Treasury Bonds in a stolen registered mail sack. In no more than a week, they had flown to another city, established some friendly relationships with the local real estate man and banker with plans of "building a shopping center." Leaving the stolen bonds with a banker in return for a \$120,000 loan, he left town. A few days later, the banks were notified of the missing bonds.

Printing methods are sophisticated enough today

(Continued on Page 12)

Pattern of Organized Crime in Thefts and Conversion of Securities

THEFTS

Four Main Targets for Theft of Securities*

1. Brokerage Houses
2. Banks
3. U.S. Mails
4. Individuals

Thieves turn over stolen securities to —

Organized crime

Stolen securities are sold to fences

CONVERSION

Stolen Securities are Converted to Cash for the Benefit of Organized Crime by:

1. Resale thru brokers
2. Placed in banks as collateral for loans
3. Placed in portfolios of insurance companies
4. Taken outside the U.S. where they are:

- A. Resold
- B. Placed in banks
- C. Used to establish trust accounts for loans or credit

FACTORS INVOLVED IN THEFTS

1. Direct infiltration by the mob
2. Persons under pressure to steal securities
- A. Gambling debts
- B. Loanmaking debts
- C. Narcotic addiction
- D. Strong arm tactics

* Securities which are stolen include corporate stocks and bonds and U.S. notes and bonds. These securities are "legal tender", federal obligations or in name of corporation or individuals.

EL DORADO DAILY NEWS

State Labor Won't Endorse Senator

ComputerDaily

7043 WIMSATT ROAD, SPRINGFIELD, VIRGINIA 22151-4080 • PHONE (703) 354-9400

Vol. 17 No. 27

Thursday, May 7, 1987

Page 1

THE VA USER-BUILT SYSTEM: A NEW PARADIGM FOR SOFTWARE

The sabotage of the computer system that helps fulfill the health needs of America's veterans continues unabated in what is fast becoming a major political battle with heavy handed allegations of large opportunity costs and major conflicts of interest, ComputerDaily has learned.

The maneuvers are a part of a multi-billion dollar high stakes procurement move — which extends to the Department of Defense — but is currently concerned with a heated struggle to control the evolution and development of the Veterans Administration Decentralized Hospital Computer Program (DHCP), several informed sources report.

The real effort making headway on Capitol Hill is the removal of control from the seven regional VA information system centers which sources say will foreclose on the millions of dollars in savings with the DHCP.

This has, in turn, provoked what one congressional insider called "a holy war" because it would remove the VA physician from his resources and centralize those resources under the firm control of administrative VA headquarters. This, according to several former DHCP activists, fits the historical strategy of several top VA officials, the VA's Office of Data Management and Telecommunications (ODM&T), two top-level Appropriations Committee staffers, and a network of vendors that stretch beyond the VA computerization efforts into the Trimis program and other agencies as well.

Further frustrating DHCP proponents, the Senate Appropriations Committee last week moved for an interim \$35 million to be appropriated for use through fiscal 1988. But a staffer on the Senate Committee told ComputerDaily that the VA won't get that funding. "They don't know it yet," he added, saying that

the congressional language into which the appropriation was written makes it unspendable until the Office of Telecommunications Assessment (OTA) completes its analysis sometime in 1988.

The OTA study will follow numerous others by Booz Allen & Hamilton, the VA Inspector General, the Air Force, Arthur D. Little, GAO, House Appropriations Surveys & Investigations, Battelle, Mitre and others.

The removal of control from the medical leaders in the VA medical centers back to administrative headquarters will, a top authority says, continue to sacrifice the integrity of the health care system for the expediency of a wider girth of contracting opportunity.

IN THIS ISSUE

The VA User-Built System: A New Paradigm For Software.....	1
COS To Use Sun As Tester Workstation.....	3
Alliant Announces Network Supercomputing Environment.....	3
Construction Begins In N.C. On Konica's 1st U.S. Manufacturing Plant.....	3
Fraud Commission Releases Final Report For Comment.....	3
High Speed LAN Over Voice On A PC.....	4
Western Digital Reaches Agreement To Acquire Faraday Electronics.....	4
Codercard And Isometry Inc. Enter Into Acquisition Discussions.....	5
Five Blue Cross/Blue Shield Plans, EDS Sign Major DP Services Agreement.....	5
Calvani Outlines Bases Of Antitrust Problems.....	6
NEW PRODUCTS.....	7
Wolpe Calls New Trade Bill "Ray Of Hope".....	8

Editor and Publisher, J. Daniel Casolaro

Published Every Business Day by COMPUTER AGE® a division of EDP News Services, Inc.
Single Subscriptions \$850 per year. Multi-copy rates and free sample issues available upon request.
Copyright 1987 by COMP® AGE® Re: Production prohibited without express permission.

ComputerDaily

7043 WIMSATT ROAD, SPRINGFIELD, VIRGINIA 22151-4080 • PHONE (703) 354-9400

Vol. 17 No. 55

Wednesday, June 17, 1987

Page 1

Part II Of A Continuing Series:

IMPACT OF PENTAGON POLICIES ON COMMERCIALIZATION OF ADVANCED TECHNOLOGIES

The Defense Department's Strategic Computing Initiative (SCI) may be too heavily geared toward military applications rather than simply toward technological advance, according to Jay Stowsky, a research fellow at the Berkeley Roundtable on the International Economy (See *ComputerDaily*, June 15, 1987). This means, essentially, Stowsky said, that U.S. competitive strategies are being sacrificed to the larger political agenda of technological superiority over the Soviet Union.

What we need, Stowsky makes clear, is more research aimed at non-military application. His case, published in the *World Policy Journal*, is well presented.

The SCI – being designed by the Defense Advanced Research Projects Agency (DARPA) – is being applied in generic research and military product development *simultaneously*, Stowsky says. "In other words, DARPA intends to demonstrate the utility of generic technologies it develops by designing them from the outset to be used in three prototype military systems – an autonomous land vehicle for the Army, a pilot's navigational associate for the Air Force and a battle management system for the Navy."

"What worries many computer scientists about SCI...is that the program is heavily geared toward applications rather than simply toward technological advance. This seems to represent a sharp departure from DARPA's proven model for success," Stowsky said. (Continued on Page 3)

POLITICAL AGENDA INTERFERING WITH HEALTH CARE SYSTEMS FOR AMERICA'S VETERANS

Despite independent evaluations showing greater functionality at less cost, the Veterans Administration Decentralized Hospital Computer Program (DHCP) will undergo still another investigation – this time by the Office of Technology Assessment (OTA). This new OTA inquiry was sparked by a political agenda to shift authority over DHCP from the seven regional VA medical centers to the central office of the VA in Washington, D.C., *ComputerDaily* has learned.

The OTA study – to be performed by OTA employees Karen Bandy and Joan Winston – will be a three month review – and will follow on the heels of another report by the General Accounting Office which accumulated thousands of manhours of study. (Continued on Page 2)

IN THIS ISSUE

Impact Of Pentagon Policies On Commercialization Of Advanced Technologies	1
Political Agenda Interfering With Health Care Systems For America's Veterans	1
INDUSTRY NOTES	4
Xerox Charged With Restricting Third Party Resale	5
Defining Barriers In Desktop Publishing And Realizing Potential	5
Employee Turnover In Electronics Industry	5
Engineers Mean Incomes Placed At \$53,889	6
Major Corporations To Assist NBS In Forming Electronic Publishing Lab.	7
Matchmaker Trade Mission In London And Paris	8
Japanese Vendors Dominate Top 5 ASIC Suppliers	8
Congress Set To Review DOD Inventory Controls	8
NEW PRODUCTS	9
GOVT. PROCUREMENT OPPORTUNITIES	10
PROTESTS	10

Editor and Publisher, J. Daniel Casolaro

Published Every Business Day by **COMPUTER AGE**® a division of EDP News Services, Inc.
Single Subscriptions \$850 per year Multi-copy rates and free sample issues available upon request.
Copyright 1987 by **COMPUTER AGE**®. Reproduction prohibited without express permission.

THE ROBOTICS REPORT

The Authoritative Washington Report on the Robotics Industry including new Mechanical and Military Applications, E-O Developments, Hardware, Software, Research, Development, and Special Marketing Opportunities.

Vol. 8 No. 4

April 1989

Page 1

ROBOTIC TECHNOLOGY MUST BE NURTURED, NEURAL DEVELOPER SAYS

Momentum achieved by the U.S. robotics industry in the 1980s must not be allowed to falter as the decade draws to a close on this critical technology, according to a leading robotics expert.

Emphasizing the point, Dr. James Albus, chief of the Robot Systems Division at the National Institute of Standards and Technology Center for Manufacturing and Engineering, added that "economic barriers" to robotics development must be overcome "if we are to remain competitive in the global marketplace."

"We are about to draw back the curtain on the 1990s to view a factory of the future which has integration as its foundation," Albus said. "Robots will appear in more environments that are less structured, more unpredictable and even hostile."

(Continued on Page 2)

MARIETTA WINS PACT FOR SMART ROBOT CONTROL

The Air Force has selected Martin Marietta Corp. to develop a "neural network" computer system to enable robots to perform tasks on their own.

Under a 39-month contract, Martin Marietta Aero & Naval Systems, Baltimore, Md., will develop a neural control system for use by the Avionics Laboratory at Wright-Patterson Air Force Base, Ohio.

It will be installed on two Martin Marietta-built test beds -- a high-performance robotic arm modeled after a human arm and an industrial robot resembling a forklift.

The robotic arm will be designed to learn a difficult tracking maneuver requiring precise coordination. A

(Continued on Page 6)

CRUCIAL TECHNOLOGY RESEARCH AGENDA: 22 AREAS SELECTED FOR PRIORITY FUNDING

Software productivity, microelectronics, parallel processing, machine intelligence/robotics and data fusion are just a few of the 22 crucial technologies designated by the U.S. government as critical to national security and qualitative superiority of U.S. weapons.

Senator Jeff Bingaman (D-N.M.), chairman of the Armed Services subcommittee on the military industry, who sponsored the list priority last year, held a hearing last Friday during which the report by the Defense and Energy Department was officially released.

Required by a provision authored by Bingaman as part of the fiscal year 1989 Defense Authorization Act (Public Law 100-456), the Critical Technologies Plan (Continued on Page 10)

IN THIS ISSUE

Robotics & Machine Intelligence	2
Staubli/Harwell Joint Venture	4
Planning A Path For A Robot	4
Mechanical Dynamics To Develop "Android"	5
Doctor's Program In Robotics	6
Europe's "Prometheus"	6
Software Quality Control	8
Success Reported With CALS	9
AI Project Under Way At Siemens	9
Smart Field Devices	10

Publisher, S.L. Miller

Published by Miller Publishing Group, Inc.

3916 Prosperity Avenue, Suite 310, Fairfax, Virginia 22031. Phone (703) 573-8400

Single Subscriptions \$175 PER YEAR. Multi-copy and free samples available upon request.

Editor, J. Daniel Cassien

All rights reserved. Reproduction prohibited without the express written permission of the publisher.

EXPERIENCE:

BOOKS:

EDITOR-IN-CHIEF:

Author, editor & reporter since 1969

THE ICE KING, a novel (1982)

MAKES ME THINK OF TALL GREEN GRASS, a collection of short stories (1973)

COMPUTER AGE & EDP NEWS SERVICES

-- Publications of EDP News Services included:

THE ROBOTICS REPORT
COMPUTER DAILY
SOFTWARE DIGEST
WORLD TRADE
FEDERAL COMPUTER MARKET REPORT
EDP WEEKLY
MINI MICRO COMPUTER REPORT
EFTS INDUSTRY REPORT

-- started with Computer Age & EDP News as an associate editor in 1976 and became editor-in-chief nearly 10 years ago. Left in May, 1989 to pursue independent writing.

OTHER PUBLICATIONS & NEWS SERVICES:

-- Washington correspondent, contributor, columnist and editor for national magazines, daily newspapers and trade journals including:

WASHINGTON CRIME NEWS (investigative)
COURT SYSTEMS (edited)
CRIME CONTROL DIGEST
EL DORADO NEWS TIMES (correspondent)
PROVIDENCE JOURNAL
WORLD NEWS
HOME & AUTO (columnist)
RHODE ISLAND REVIEW (literary mag)
GLOBE NEWSPAPERS (Bureau Chief)

FILMS:

RAIN FOR A DUSTY SUMMER (1973)
-- wrote initial treatment
TO FLY WITHOUT WINGS (1981) THE ARABIAN HORSE
-- contributed as writer

WATERGATE: SHOCK CLAIM BY 007 AGENT

MAY 11, 1974 PAGE 7

THE DEMOCRATS were warned, in advance, that G.O.P. agents were spying on their election headquarters, the National Star learned this week.

And the whole Watergate scandal might have been avoided had party chiefs not ignored this warning.

They were even told which office was being bugged and who was doing the bugging it was alleged. But instead of taking action, they just shrugged their shoulders and claimed that they did not have money to do anything about it.

This astonishing new twist to Watergate was revealed by the man who gave the Democrats the lip-off — private investigator Arthur Woolston-Smith. His story — told exclusively to The

By DAN CASOLARO and STEVE DUNLEAVY

Star — has now been verified by three top members of the Democrats' 1972 campaign.

Woolston-Smith, a former British intelligence man, is a cigarette-spoken, pipe smoker, whose exploits read like a page out of a James Bond book.

Contacted

He said this week: "I told the Democrats about the bugging three months before the Watergate building break-in. I told them that the offices of the Democratic National Committee was being bugged."

"I don't think I could have spelled it

out more. It's no use asking me why they did nothing. It's all beyond me."

Woolston-Smith said he contacted an old friend and former Kennedy administration aide, William Haddad.

Haddad, a former reporter and assistant to Senator Robert Kennedy told the Star: "Yes, it's one hundred per cent true, Smith passed this stuff on to me. 'I wrote to Democratic Party Chairman, Larry O'Brien.'"

The Star has a copy of the letter which has been acknowledged by former Chairman O'Brien, Deputy Director Stanley Greigg and Communications Director John Stewart.

Woolston-Smith added: "On the morning of the break-in John Stewart rang me and in a voice like it was New Year's Eve said: 'It happened. Smitty. It happened. You said it was going to happen and it happened.'"

HERNDON TRIBUNE, April 12, 1972, Page 4

Reston Man Heads Software Firm

John Norris Maguire has been named President of software ag (North America). This appointment was recently announced by Peter K. Krele, Chairman of the Board of Directors of software ag (Europe). The company, one of the largest computer software firms in Europe, is headquartered in Darmstadt, Germany and has pioneered sophisticated computer applications and the

development of generalized computer software systems. One of the software products offered by the firm is the ADABAS data management system, available for most medium and large scale computers. This system, which automatically solves all data file handling problems, has been installed successfully at numerous computer sites throughout Europe at \$120,000 per computer

installation.

In discussing projections for the upcoming year, Mr. Maguire said that it is his intent to reverse the current trend between the U.S. and Germany wherein trade in the computer hardware and software field is almost entirely an export affair. Last year, according to him, the U.S. sold \$200 million dollars worth of software to Germany but we imported practically nothing in that category. This year, he hopes that trade in the software will be reciprocal with Germany.

Several articles have appeared concerning these German computers recently in such leading publications as EDP DAILY, EDP WEEKLY and SOFTWARE DIGEST. Articles are in preparation to appear in COMPUTER AGE and COMPUTER WORLD.

Mr. Maguire will be responsible for the firm's marketing and technical activities in North America. He is a graduate of the Massachusetts Institute of Technology, and was formerly



John Norris Maguire

a Senior Vice President and Director of Technical Operations for Consolidated Analysis Centers, Inc., one of the oldest computer software firms in the United States. Mr. Maguire, his wife, Ann, and four children, Norris, Alicia, Marty, and Michael, have resided in Reston at 12124 Basset Lane, Hunters Woods, for the past six years.

Computer Age[®]

News & Analysis of International Computer Markets

Published by EDP News Services Inc. • 514 10th Street, N.W. • Washington, D.C. 20004 • (202) 737-7677 • TWX 710-822-9215

Vol. 2 No. 16

May 31, 1972

DARMSTADT, W. GERMANY -- ADABAS, A DATA BASE MANAGEMENT SOFTWARE system made in Germany is now being exported to the U. S. to compete directly with manufacturer software. The new package is a product of the AIV Institute and its sister organization, Software AG Europe, both of Darmstadt and both headed up by Peter K. Kreis, Europe's "Mr. Software."

Adabas operates on IBM Series 360 and 370 computers, the RCA Spectra computers, the Siemens 4000 Series computers and virtually all byte oriented machines. Adabas requires only 110K bytes of core where competing U.S. packages operate with a minimum of 250K bytes.

According to John Norris Maguire, president of the newly formed Software AG North America, Adabas can: take over all existing files and data and integrate them into the data bank automatically without preprogramming; provide a freeform retrieval capability so that individual records or subsets of the data base may be easily accessed; allow information from different files to be coupled automatically; operate in on-line or batch processing modes; provide a checkpoint and restart capability; provide a multilevel data security function and an encoding capability so that even a "dump" would be unreadable; allow that each field be redefined, expanded or cancelled at any time; allow that logical definition of any record may be expanded or cancelled at any time; guarantee that the data base may grow continuously even if different storage devices are required for the same file; provide random access capability so that retrieval speeds are almost wholly independent of data base volume; allow for sequential processing with speeds comparable to stand alone applications; optimize searching by using the knowledge of the system about distribution of data; handle automatically the administration of all data storage devices attached to the computer system; and be "forgiving" and flexible in retrieval so that records that may possibly satisfy search criteria will also be identified, (e.g., names that sound like SMITH, but are spelled differently will be considered).

11/10/72

Maguire told Computer Age that Adabas has no restrictions concerning structure, sorting or any special data format, and that it can offer the highest possible degree of data protection against machine and/or human actions, ~~substantiated~~ or not. Maguire said that Adabas has been installed in 20 locations in Europe during the past two years and to date, "not one bit of data has been lost, though there have been plenty of machine problems."

Maguire said that Adabas allows up to 500 fields per record with repeating fields counting only once; up to 200 descriptors per file with 12 of that number having phoneticization capability which has been implemented in one day for many languages; up to 16 million records per file; and up to 255 files per data base. Maguire said that the city of Vienna, long considered a major computing showcase for IBM, has thrown out that company's free IMS software and turned all its data base files over to Adabas (IBM software is not unbundled in Europe). He also said that the city of Munich has followed suit by throwing out Siemens' data base management package and installing Adabas.

According to Maguire, Peter Kreis will be in Washington, D.C., on June 12, to demonstrate Adabas and to give full technical presentations to Pentagon officials and other groups. "So far," Maguire said, "I've arranged and held 12 test marketing presentations of Adabas in the U.S., and the results of each have been extremely favorable. Consistently, I have been able to show potential users that they are paying \$100,000 per year for each chunk of the 131K bytes of core needed for competing data base management systems -- which need a minimum of 250K bytes to start operations with." Maguire said that Adabas' cost is \$120,000, and a demonstration of Adabas operating with user data is available for \$2,500, which is deductible from the overall purchase price if a user contract is signed.

Maguire also said that on June 15, as a guest speaker at the ACM annual technical symposium to be held in Silver Spring, Md., he will discuss Adabas and how it relates to major technological trends in the computer industry. Fellow panelists for the discussion on trends will be Dr. Robert D. Ayres, vice president of the International Research and Technology Corp.; Dr. Marvin J. Cetron, president of Forecasting International Ltd.; Dr. Herbert R. J. Grosch, senior research fellow, National Bureau of Standards; and Dr. Wayne B. Swift, of the executive staff, Computer Sciences Corp. Maguire also said that a technical presentation of Adabas will also be made at the symposium.

Adabas In Europe...

Adabas is a joint product of Software AG Europe, one of the few German companies actively marketing standard programs and systems, and the AIV Institute of Darmstadt. The institute, founded in 1962, is a "software plant," employing around 150 specialists in software research, development and consulting.

According to Peter Kreis, when one compares the number of software firms active in the U.S. to those active in West Germany, and then compares the gross incomes of software firms in the two countries, "All these facts tend to show that the German software market is underdeveloped." However, Kreis points out that to be small can often provide a considerable advantage. "For instance," he said, "effective utilization of small capacities forces the use of more sophisticated methods." This is precisely the major advantage the Adabas data base management system holds over its American counterparts -- effective use of limited resources.

Kreis said that in the U.S., payroll systems make up the largest group of software packages (about 25 per cent), while in Germany, sales statistics packages are in the lead. However, he said that the markets in both countries are quickly changing with data base

management systems and management information systems gaining ground rapidly. Because a top data base management package -- Adabas -- was developed in Germany, "it shows that software expertise in Germany is on a par with the U.S.," Kreis said.

"Sales of Adabas in Europe have been very successful," Kreis told Computer Age, "we have, and are presently demonstrating Adabas for potential clients in the banking industry. One major bank in particular is now using Adabas in a real estate information system which it markets to other banking concerns. As already noted, we have succeeded in throwing out IBM in Vienna, and Siemens in Munich. After the Munich installation gains experience, we can be sure that other German cities will hear about it and likely buy Adabas for the same purpose." Kreis also said that Adabas has been installed in the Federal Republic's research and development subsidiary, which will use the package on an IBM 360/65 computer system.

Marketing plans for Adabas in Western Europe are largely governed by a German law which would be extremely frustrating to U. S. businessmen -- that of product comparison. German businessmen are by law forbidden to discuss the relative performance of their products in relation to competing products, ~~not~~ even when talking directly to a client. A vendor can only make the advantages of his product obvious through demonstrations and straight technical literature type advertising. Kreis said that Software AG's marketing for Adabas in Western Europe will be mainly done through direct mail advertising, information through trade journal articles and demonstrations at industry shows and conventions.

Kreis told Computer Age that interest is very high in Eastern Europe concerning Adabas. "I have been in Leningrad, Budapest and several other major Eastern cities to talk about Adabas," he said. "The people there are interested and of course would like to buy the package. However, there are many complications in dealing with the East since they usually cannot pay in hard currency and would like to pay in some form of barter goods which we simply do not need."

Kreis said that the East Europeans see their problems in data management as linked integrally to the machine. "The first thing they want to get their hands on is a computer hardware system," Kreis said. "They worry very little at the onset about software. When they do begin expressing a desire for software it sometimes can be very difficult to do business with them."

The Kreis Philosophy...

"The main thrust of our marketing philosophy is quality," Kreis stated. "We are more than sure that by producing a quality product we can stay in business where others have failed. The team we have assembled at Software AG is the best in Europe, and in my opinion, the best in the world. Our people are cross-trained in market research, science and software development. Through production of quality products we feel that we can guarantee our customers that we'll be around 20 years from now. We do not plan to follow the path that many software firms in Europe and the U. S. have taken, that of selling too much and making too many promises and then spreading yourself too thin to survive in an effort to make good on your commitments."

Kreis said that Software AG is looking forward to being a worldwide software firm. He said that though Software AG has been recently involved in negotiations with multinational computer manufacturers who wish to sell Adabas and other software products through licensing agreements, "we have been very straight about not selling any interest or shares in Software AG. We will need those shares for later expansion."

Kreis said that Software AG is "not in a hurry to expand...we will simply take the right step at the right moment. At this time we have decided to step into the U.S. market. What we see eventually is a multinational software company with a subsidiary devoted to special hardware development. And please remember, it is not a question of how many people you have; it is a matter of quality. We have developed sophisticated software with four people where others have tried to do the same with an army of 250."

At present, Kreis pointed out that Software AG and the AIV Institute "have good contacts throughout the world, from the Soviet Union to Japan. We are now consulting in Taiwan and Morocco and have interests in Latin America and the rest of Africa. Everything we do is on our way to collecting information, getting more experience, and not telling others just how we have done it."

Within the next five years, Kreis said that a "clearing of both the software industry and market will occur," in which unsophisticated software producers and users will fall by the wayside. "This has already begun in the U.S.," he said. Software AG plans to develop a pool of intelligence that will be able to solve data management problems for the sophisticated users who survive the clearing out process.

"I would say that we will be selling intelligence for intelligent people," Kreis said. "I think that when software users reach management positions they begin to think in different ways. They want to buy software which is worthwhile -- they want to be able to use their computers with up to 80 per cent efficiency, instead of the 50 per cent efficiency prevalent today. What we will deliver to the sophisticated market is automatic programming languages and Adabas. Further developments to go along with these packages will include modules for a dialogue free language."

Kreis added that in the future, the traditional ways of programming -- Cobol programming with separate data files -- will fall by the wayside, too. "Adabas has solved the data file handling problem. In the future we will see more sophisticated and labor saving programming tools -- automatic programming languages, if you will -- which will be designed so that they can be implemented by users as well as analysts and programmers."

Trends In Europe...

Kreis predicted that the European computer industry will continue to suffer from needless division brought on by nationalistic pride, "for at least the next five to 10 years." He pointed out that the present wave of joint ventures being entered into by European computer manufacturers is an important first step, but nothing short of an overall merger will make the European computer industry strong enough to combat the U.S. competition.

"You must understand," he said, "that cooperative agreements are not really mergers and therefore cannot be expected to achieve the same possibilities that mergers can. In Europe, there are still very strong nationalistic feelings that must be dealt with. Far away still, is a united 'European' feeling for the computer industry or any other industry. I think for this reason the Japanese have established for themselves a much better point of departure for competing with the U.S."

Kreis said that in Europe, "Philips still thinks that it is the best; Siemens, of course, still thinks that it is the best in the world; the French have always believed that they are the greatest; and the English still behave like they are gods." For these reasons, Kreis said that Software AG is now looking toward cooperative agreements outside of Europe. "We may come back and buy some European companies if we feel that we need them," he said. "The main thing to understand is that right now you cannot form a viable team of separate companies in Europe. It simply will not work."

EDP Daily

514 10th Street, N.W., WASHINGTON, D.C. 20004 TELEPHONE (202) 737-7677 TWX 710-822-9215

Published daily except Saturdays, Sundays, and Holidays by EDP NEWS SERVICES, a subsidiary of INFORMATION REPORTS, INC. Founded by F. T. O'CONNELL, SR. Single subscriptions \$250 a year, six months \$150. Advertising rates and conditions: from 1981 on, contact ALFRED F. LEWIS, III, Business Manager.

Vol. 11 No. 63

March 30, 1972

Page 493

SOFTWARE A G NORTH AMERICA, FORMED ABOUT TWO MONTHS AGO, HAS ANNOUNCED the marketing in the United States of ADABAS, a two year old data management system developed in Germany by a team working under Peter K. Kreis, president of AIV Institute and chairman of the board of Software A G Europe. The system, which operates on IBM Series 360 and 370 computers, the RCA Spectra 70 series, the German Siemens 4000 series and most byte oriented machines, requires only 110K bytes of core, Software A G said. It has been installed in 20 locations in Europe, which is impressive because the system is in direct competition with free manufacturer's software, as opposed to the American market where most manufacturers charge for use of their software, according to John Norris Maguire, Software A G president. Demonstrations of ADABAS with the user's data are available for \$2,500, which is deductible upon signing of the standard "use" contract. ADABAS rights of use are sold to a computer installation for \$120,000.

Maguire said ADABAS takes over existing files and data and integrates them into the data bank automatically and has no restrictions concerning structure, sorting or any special data format. It also provides a free form retrieval capability so that individual records or subsets can be easily accessed. Most other data management systems have some capability in those items, Maguire said. The following are all done by ADABAS only, according to Maguire: information from different files may be coupled automatically; operation is in an on-line or batch processing mode either separately or together; up to 199 checkpoints and a restart capability are provided, so that if something goes wrong with either the hardware or software, ADABAS will automatically restart and a multilevel data security function and an encoding capability are provided so that even a dump is unreadable.

With ADABAS, fields may be redefined, expanded or cancelled at any time and the logical definition of records may be expanded or changed at any time, Maguire said. ADABAS also allows the use of different storage devices. If the operating system can interface with any device, ADABAS will handle it because it uses just the I/O of the operating system, Maguire said. The system provides random access capability so that retrieval

speeds are almost wholly independent of data base volume and allows for sequential processing with speeds comparable to stand alone applications, Maguire said. ADABAS also optimizes searching by using its knowledge about distribution of data and handles automatically the administration of data storage devices attachable to the computer system. The system offers a high degree of data protection, Maguire said, and of the European ADABAS users he has talked to, there have been "machine problems, program errors, the whole business and they've had no disasters." The system is flexible in retrieval so that records that may possibly satisfy search criteria will also be identified (e.g. names that sound similar like Smith and Smythe, but are spelled differently will be considered).

ADABAS allows up to 500 fields per record; 200 descriptors per file with 12 of that number having a phonetization capability; 16 million records per file and 255 files per data-base. Maguire said that the city of Vienna, Austria, selected by a major computer manufacturer as a "showcase" in Europe, threw out free IMS software and switched to ADABAS which was installed in two days. Vienna has implemented all its data files into ADABAS, he said. For more information on ADABAS, contact Maguire at Software A G, 12124 Bassett Lane, Reston, Va. 22070 (AC703 171-5698). ■

EDP Daily

514 10th Street, N.W., WASHINGTON, D.C. 20004 TELEPHONE (202) 737-7677 TWX 710-822-9215

Published daily except Saturdays, Sundays, and Holidays by EDP NEWS SERVICES, a subsidiary of INDUSTRY REPORTS, INC., founded by E. T. O'CONNELL, SR. Single subscriptions \$250 a year; six months \$150. Multi-copy rates and one week's free trial on request. ALFRED E. LEWIS, III, Business Manager.

EDP Daily

514 10th Street, N.W., WASHINGTON, D.C. 20004 TELEPHONE (202) 737-7677 TWX 710-822-9215

Published daily except Saturdays, Sundays, and Holidays by EDP NEWS SERVICES, a subsidiary of INDUSTRY REPORTS, INC., founded by F. T. O'CONNELL, SR. Single subscriptions \$250 a year; six months \$150. Multi-copy rates and one week's free trial on request. ALFRED E. LEWIS, III, Business Manager.
